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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/004,116	RAMAN ET AL.	
	Examiner	Art Unit	
	Alicia Baturay	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,8,10,12,13,16 and 26-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,6,8,10,12,13,16 and 26-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the amendment filed 24 November 2009.

2. Claims 1, 6, 8, 10, 12, 13, 31 and 32 were amended.

3. Claims 2-4, 7, 9, 11, 14, 15 and 17-25 were cancelled.

4. Claims 33 and 34 were added.

5. Claims 1, 5, 6, 8, 10, 12, 13, 16 and 26-34 are pending in this Office Action.

Response to Amendment

6. Applicant's amendments and arguments with respect to claims 1, 5, 6, 8, 10, 12, 13, 16 and 26-32 and new claims 33 and 34 filed on 24 November 2009 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 5, 6, 8, 31, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman et al. (U.S. 6,442,165) in view of Luther et al. (U.S. 2003/0023877) and further in view of O'Neill et al. (EP 1 137 236).

Sitaraman teaches the invention substantially as claimed including an apparatus which may be used in conjunction with components within a network access point to load balance the processing of the network access requests using the services of at least two instances of a particular service component type (see Sitaraman, Background of the Invention).

9. With respect to claim 1, Sitaraman teaches a method of load balancing in a control node, the method comprising: determining a delay time between the control node and the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies in the plurality, the control node receiving a respective response message from each of the downstream proxies in the plurality, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective calculated delay time for each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25); and distributing a traffic load to one of the plurality of downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches maintaining a list of downstream proxies, wherein the downstream proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at the control node, load information from a plurality of the downstream proxies in the list

(Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

The combination of Sitaraman and Luther does not teach the use of an invalid SIP message.

However, O'Neill teaches an invalid SIP message, and rejecting the respective invalid SIP message (O'Neill, col. 9, paragraph 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of O'Neill in order to enable the use of an invalid SIP protocol. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

10. With respect to claim 5, Sitaraman teaches the invention described in claim 1, including the method wherein the weight assigned to each downstream proxy is also based on a pre-weighting of each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25).

11. With respect to claim 6, Sitaraman teaches a readable memory device for load balancing, the device comprising: means for calculating a delay time between a control node and each of the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies, the control node receiving a respective response message from each of the downstream proxies, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); means for assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective load information received from each downstream proxy and also in part on the calculated delay time between the control node and each respective downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25); and means for assigning a load to one of the downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches means for maintaining a list of downstream proxies (Luther, page 1, paragraph 16); means for receiving load information from each of the downstream proxies (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

The combination of Sitaraman and Luther does not teach the use of an invalid SIP message.

However, O'Neill teaches an invalid SIP message, and rejecting the respective invalid SIP message (O'Neill, col. 9, paragraph 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of O'Neill in order to enable the use of an invalid SIP protocol. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

12. With respect to claim 8, Sitaraman teaches a system for providing load balancing, the system comprising: calculating a delay time between the control node and the proxies from the plurality of proxies, wherein the delay time is determined by the control node

transmitting a message to each of the proxies in the plurality, the control node receiving a respective response message from each of the proxies in the plurality, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64), wherein the control node assigns a respective weight based upon the load information and the calculated delay times for each respective proxy (Sitaraman, col. 9, line 50 – col. 10, line 25), and wherein the control node distributes a traffic load to one of the plurality of proxies based in part on the weight of each of the proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches a plurality of proxies (Luther, page 1, paragraph 16), a control node coupled to the plurality of proxies, the control node receiving load information from each of the plurality of proxies (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

The combination of Sitaraman and Luther does not teach the use of an invalid SIP message.

However, O'Neill teaches an invalid SIP message, and rejecting the respective invalid SIP message (O'Neill, col. 9, paragraph 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of O'Neill in order to enable the use of an invalid SIP protocol. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

13. With respect to claim 31, Sitaraman teaches the invention described in claim 6, including a readable memory device for load balancing, the device comprising: means for calculating a delay time between a control node and each of the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies, the control node receiving a respective response message from each of the downstream proxies, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); means for assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective load information received from each downstream proxy and also in part on the calculated delay time between the control node and each respective downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line

25); and means for assigning a load to one of the downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches maintaining a list of downstream proxies, wherein the proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at the control node, load information from a plurality of the downstream proxies in the list (Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69) and the device wherein the load information received from each of the respective downstream proxies is determined by querying a process at each respective downstream proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

14. With respect to claim 32, Sitaraman teaches the invention described in claim 8, including a system for providing load balancing, the system comprising: calculating a delay time between the control node and the proxies from the plurality of proxies, wherein the delay time is determined by the control node transmitting a message to each of the proxies in the plurality, the control node receiving a respective response message from each of the proxies in the plurality, and the control node calculating, as the delay time, a difference between the

transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64), wherein the control node assigns a respective weight based upon the load information and the calculated delay times for each respective proxy (Sitaraman, col. 9, line 50 – col. 10, line 25), and wherein the control node distributes a traffic load to one of the plurality of proxies based in part on the weight of each of the proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches maintaining a list of downstream proxies, wherein the proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at the control node, load information from a plurality of the downstream proxies in the list (Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69) and the system wherein the load information received from each of the proxies is determined by querying a process at each respective proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

15. With respect to claim 34, Sitaraman teaches the invention described in claim 5, including the method wherein the pre-weighting is determined dynamically via processes running on each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25).

16. Claims 10, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and further in view of McLampy et al. (U.S. 7,028,092).

17. With respect to claim 10, Sitaraman teaches a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, McLampy teaches receiving a new call (McLampy, Fig. 2, element 252; col. 9, lines 29-42); determining a call volume; if the call volume is below the threshold value, assigning the new call to a first proxy of the group of proxies based on a round robin protocol (McLampy, col. 14, Table 3); and if the call volume is above the threshold value, assigning the new call to a second proxy of the group of proxies based upon the weights assigned to each proxy (McLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of McLampy in order to enable the use of the round

robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (McLampy, col. 1, lines 19-21).

18. With respect to claim 26, Sitaraman teaches a method, performed by a control node, for the control node to distribute load to a first and second proxy, wherein the control node includes a threshold value, the method comprising: transmitting a first message to the first proxy, receiving a first reply from the first proxy, wherein the first reply is in response to the first message, and determining a first delay time between the transmitting of the first message and the receiving of the first reply; transmitting a second message to the second proxy, receiving a second reply from the second proxy, wherein the second reply is in response to the second message, and determining a second delay time between the transmitting of the second message and the receiving of the second reply; (Sitaraman, col. 6, lines 56-64); assigning weights to the first proxy and the second proxy based on the first delay time and the second delay time, respectively (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, McLampy teaches receiving incoming calls (McLampy, Fig. 2, element 252; col. 9, lines 29-42); if a current call volume is below the threshold value, assigning the incoming calls to the first proxy and the second proxy based on a round robin protocol (McLampy, col. 14, Table 3); and if the current call volume is above the threshold value, assigning the incoming calls to the first proxy and the second proxy based on their respective weights (McLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of MeLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (MeLampy, col. 1, lines 19-21).

19. With respect to claim 29, Sitaraman teaches the invention described in claim 26, including the method wherein the control node assigns weights to the first proxy and the second proxy also based on a pre-weighting of the first proxy and the second proxy (Sitaraman, col. 9, line 50 – col. 10, line 25).

20. Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of MeLampy and further in view of O'Neill.

21. With respect to claim 12, Sitaraman teaches the invention described in claim 10, including a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies

based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, MeLampy teaches receiving a new call (MeLampy, Fig. 2, element 252; col. 9, lines 29-42); determining a call volume; if the call volume is below the threshold value, assigning the new call to a first proxy of the group of proxies based on a round robin protocol (MeLampy, col. 14, Table 3); and if the call volume is above the threshold value, assigning the new call to a second proxy of the group of proxies based upon the weights assigned to each proxy (MeLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of MeLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (MeLampy, col. 1, lines 19-21).

The combination of Sitaraman and MeLampy does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the messages sent to the proxies are SIP INVITE messages (O'Neill, col. 9, paragraph 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and MeLampy in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not

delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

22. With respect to claim 27, Sitaraman teaches the invention described in claim 26, including a method, performed by a control node, for the control node to distribute load to a first and second proxy, wherein the control node includes a threshold value, the method comprising: transmitting a first message to the first proxy, receiving a first reply from the first proxy, wherein the first reply is in response to the first message, and determining a first delay time between the transmitting of the first message and the receiving of the first reply; transmitting a second message to the second proxy, receiving a second reply from the second proxy, wherein the second reply is in response to the second message, and determining a second delay time between the transmitting of the second message and the receiving of the second reply; (Sitaraman, col. 6, lines 56-64); assigning weights to the first proxy and the second proxy based on the first delay time and the second delay time, respectively (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, MeLampy teaches receiving incoming calls (MeLampy, Fig. 2, element 252; col. 9, lines 29-42); if a current call volume is below the threshold value, assigning the incoming calls to the first proxy and the second proxy based on a round robin protocol

(MeLampy, col. 14, Table 3); and if the current call volume is above the threshold value, assigning the incoming calls to the first proxy and the second proxy based on their respective weights (MeLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of McLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (MeLampy, col. 1, lines 19-21).

The combination of Sitaraman and MeLampy does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the first message and the second message are INVITE messages (O'Neill, col. 9, paragraph 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and MeLampy in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

23. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of Luther and further in view of McLampy.

24. With respect to claim 13, Sitaraman teaches a system for load balancing, the system comprising: the control node including a threshold call load value, the control node including a table of weights (Sitaraman, col. 6, lines 56-64), each of the weights associated with one of the plurality of proxies, the weights determined in part by a delay time between the control node and the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches a plurality of proxies, wherein the proxies implement the SIP protocol (Luther, page 1, paragraph 16); and a control node coupled to the plurality of proxies (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

The combination of Sitaraman and Luther does not explicitly teach use of the round robin method.

However, McLampy teaches receiving a new call from a user on the network (McLampy, Fig. 2, element 252; col. 9, lines 29-42), if the call volume is below the threshold call load value, then distributing the new call to a first proxy of the plurality of proxies in a round

robin fashion (McLampy, col. 14, Table 3), if the call volume is above the threshold call load value then distributing the new call to a second proxy of the plurality of proxies that has the lowest weight (McLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of McLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (McLampy, col. 1, lines 19-21).

25. With respect to claim 16, Sitaraman teaches the invention described in claim 13, including the system wherein the weights for the respective proxy is also based on a parameter of the respective proxy (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the loading of the respective proxy.

However, Luther teaches wherein the control node receives messages from each respective proxy of the plurality of proxies, each message indicating the loading of the respective proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the loading of the respective proxy. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

26. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and in view of MeLampy in view of O'Neill and further in view of Schuster et al. (U.S. 6,577,622).

27. With respect to claim 28, Sitaraman teaches the invention described in claim 27, including a method, performed by a control node, for the control node to distribute load to a first and second proxy, wherein the control node includes a threshold value, the method comprising: transmitting a first message to the first proxy, receiving a first reply from the first proxy, wherein the first reply is in response to the first message, and determining a first delay time between the transmitting of the first message and the receiving of the first reply; transmitting a second message to the second proxy, receiving a second reply from the second proxy, wherein the second reply is in response to the second message, and determining a second delay time between the transmitting of the second message and the receiving of the second reply; (Sitaraman, col. 6, lines 56-64); assigning weights to the first proxy and the second proxy based on the first delay time and the second delay time, respectively (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, MeLampy teaches receiving incoming calls (MeLampy, Fig. 2, element 252; col. 9, lines 29-42); if a current call volume is below the threshold value, assigning the incoming calls to the first proxy and the second proxy based on a round robin protocol (MeLampy, col. 14, Table 3); and if the current call volume is above the threshold value, assigning the incoming calls to the first proxy and the second proxy based on their respective weights (MeLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of MeLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (MeLampy, col. 1, lines 19-21).

The combination of Sitaraman and MeLampy does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the first message and the second message are INVITE messages (O'Neill, col. 9, paragraph 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and MeLampy in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

The combination of Sitaraman, MeLampy and O'Neill do not teach the use of REJECT messages.

However, Schuster teaches wherein the first reply and the second reply are REJECT messages (Schuster, col. 20, line 66 - col. 21, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman, McLampy and O'Neill in view of Schuster in order to enable the use of REJECT messages. One would be motivated to do so in order to provide features and capabilities to telephone service that create new opportunities for users and for service providers (Schuster, col. 3, lines 31-38).

28. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and in view of McLampy and further in view of Luther.

29. With respect to claim 30, Sitaraman teaches the invention described in claim 26, including a method, performed by a control node, for the control node to distribute load to a first and second proxy, wherein the control node includes a threshold value, the method comprising: transmitting a first message to the first proxy, receiving a first reply from the first proxy, wherein the first reply is in response to the first message, and determining a first delay time between the transmitting of the first message and the receiving of the first reply; transmitting a second message to the second proxy, receiving a second reply from the second proxy, wherein the second reply is in response to the second message, and determining a second delay time between the transmitting of the second message and the receiving of the second reply; (Sitaraman, col. 6, lines 56-64); assigning weights to the first proxy and the second proxy based on the first delay time and the second delay time, respectively (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, MeLampy teaches receiving incoming calls (MeLampy, Fig. 2, element 252; col. 9, lines 29-42); if a current call volume is below the threshold value, assigning the incoming calls to the first proxy and the second proxy based on a round robin protocol (MeLampy, col. 14, Table 3); and if the current call volume is above the threshold value, assigning the incoming calls to the first proxy and the second proxy based on their respective weights (MeLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of MeLampy in order to enable the use of the round robin method. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (MeLampy, col. 1, lines 19-21).

The combination of Sitaraman and MeLampy does not explicitly teach use of querying a process at each respective proxy.

However, Luther teaches and the method further comprising: querying a first process on the first proxy; and querying a second process on the second proxy, wherein the control node assigns weights to the first proxy and the second proxy also based information gathered from querying the first proxy and the second proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and MeLampy in view of Luther in order to enable querying a process at each respective proxy. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling

substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

30. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of Luther in view of O'Neill and further in view of McLampy.

31. With respect to claim 33, Sitaraman teaches the invention described in claim 5, including a method of load balancing in a control node, the method comprising: determining a delay time between the control node and the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies in the plurality, the control node receiving a respective response message from each of the downstream proxies in the plurality, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective calculated delay time for each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25); and distributing a traffic load to one of the plurality of downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches maintaining a list of downstream proxies, wherein the downstream proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at

the control node, load information from a plurality of the downstream proxies in the list (Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules (Luther, page 1, paragraph 12).

The combination of Sitaraman and Luther does not teach the use of an invalid SIP message.

However, O'Neill teaches an invalid SIP message, and rejecting the respective invalid SIP message (O'Neill, col. 9, paragraph 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of O'Neill in order to enable the use of an invalid SIP protocol. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol (O'Neill, col. 13, paragraph 13).

The combination of Sitaraman, Luther and O'Neill does not explicitly teach manually pre-weighting.

However, McLampy teaches the method wherein the pre-weighting is manually configured (McLampy, col. 13, line 24 – col. 15, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman, Luther and O'Neill in view of McLampy in order to enable to use manual pre-weighting. One would be motivated to do so in order to assist in controlling real-time transport protocol flow through multiple networks via media flow routing (McLampy, col. 1, lines 19-21).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at M-Th 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

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February 23, 2010

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